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United States Patent [19]**Sakuma et al.**[11] **Patent Number:** **5,364,890**[45] **Date of Patent:** **Nov. 15, 1994**[54] **DENTAL ADHESIVE COMPOSITION**[75] **Inventors:** **Tetsuro Sakuma**, Tokorozawa;
Junichi Okada, Noda, both of Japan[73] **Assignee:** **GC Corporation**, Tokyo, Japan[21] **Appl. No.:** **67,174**[22] **Filed:** **May 26, 1993****Related U.S. Application Data**

[63] Continuation of Ser. No. 911,512, Jul. 10, 1992, abandoned.

[30] **Foreign Application Priority Data**

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523/118[58] **Field of Search** 106/35; 523/109-116;
433/228.1; 564/252; 526/217, 328, 329.7;
522/92[56] **References Cited****U.S. PATENT DOCUMENTS**4,525,493 6/1985 Omura et al. 523/116
4,778,471 10/1988 Bajpai .
5,105,010 4/1992 Sundararaman et al. 564/252
5,136,006 8/1992 Sundararaman et al. 526/312**FOREIGN PATENT DOCUMENTS**

55-164611 12/1980 Japan A61K 6/08

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Maier & Neustadt[57] **ABSTRACT**

A compound having a carbodiimide in its molecule is incorporated in a dental adhesive composition. With this composition, dental composite material can be firmly bonded to the enamel and dentin of a tooth, thereby avoiding formation of a gap which may otherwise cause secondary caries.

20 Claims, No Drawings